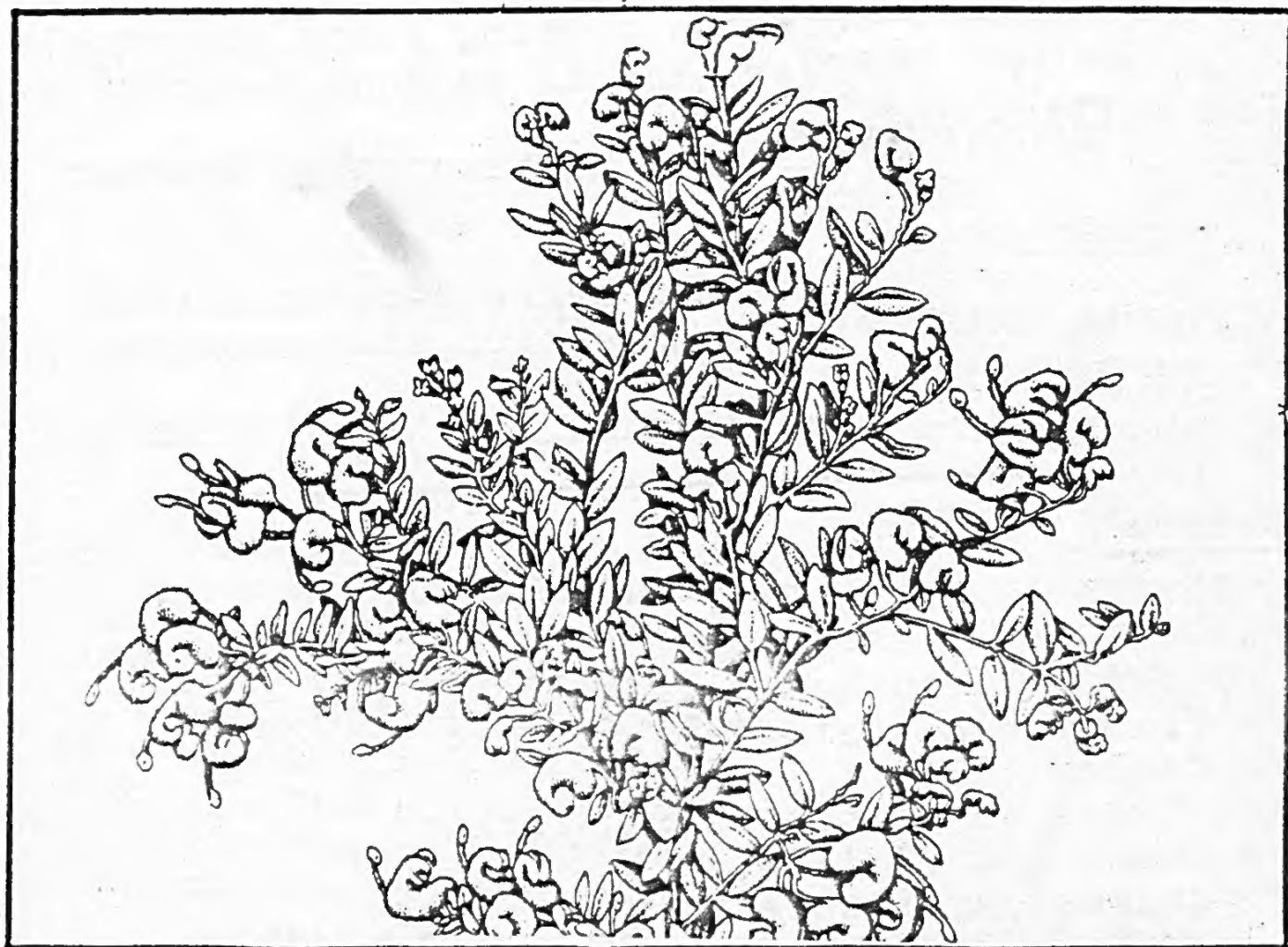


AUGUST 1989

Field Naturalists Club of Ballarat *Incorporated*

EXCURSION - NEWS SHEET

- Meeting : Aug. 4th. Mr. N. Marriot; Grevilleas
- Meeting : Sept. 1st. Mr. T. Burger: N.Z. Flora and its Relationship
to Australia.
- Excursion : Aug. 5th. (Sat.) Working bee, Linton Nature Reserve. G. Binns.
- Excursion : Sept. 3rd. Porcupine Ridge. P. and W. Murphy.



President;	Dr. F. Harrap	Ph. 053 301651
Vice Pres.	Miss H. Burgess	312210
Secretary:	Mr. G. Binns	332282
Treasurer:	Mrs. F. Williamson	327631
Editor:	Mr. A. Barlow	413378

Meetings as specified are held at the School of Mines and Industries, Lydiard Street Sth., Art Building, commencing at 7.30 p.m.
EXCURSIONS, AS SPECIFIED, COMMENCE FROM CROCKERS, cnr. STURT AND ARM-STRONG STS., BALLARAT, at 9.30 a.m. for FULL DAY OUTINGS OR AT 1.30 p.m. for HALF DAY*

For Your Diary

Sept, 8th.- 10th. W.V.F.N.A. Early Spring Camp-out and meeting at Castle-
maine. Details of programme and accommodation now available.
Sept. 23rd. 24th. Anglesea Wildflower Show by Anzair Inc. Sat. 10a.m.-
5.30p.m. Sun. 10a.m.- 5p.m. See brochure for the many features.

Observations

Lyndsay Fink

Eastern Rosella and Black Should-
ered Kite in Sturt ST. White
Cockatoo feeding young Moorabool
River. Emu in paddock behind B.C.A.E

Kit Williamson

Pair Grey Kurrawongs at Grammar
school.

Barlow

Eastern Rosella back in garden.
Pied Butcherbird at Bunningyong.

Frank Harrap

More Bronzewings in Ballarat area .

Notice

The Castlemaine Field Naturalists Club (Inc).
will host the early spring campout of the Western
Victorian Field Naturalists Clubs Association
on Friday 8th, Saturday 9th, and Sunday 10th of
September 1989.

Enquiries re campout: Ern Perkins (box) 324)
or phone 054 72 3124.

Programmes available from Secretary.

BIRDLIST 9-7-89.

BALLARAT TO TULLAROOP RESERVOIR,
via LIGNUM SWAMP.

ROADSIDES:

Little Pied Cormorant
Shelducks
Brown Hawks
Swamp Harrier
Dusky Moorhens
Masked Lapwings
Crested Pigeons
Galahs
Long-billed Corellas
Willy Wagtail
Magpies
Little Raven

LIGNUM SWAMP:

Swans
White-faced Heron
Shelducks
Wood Ducks
Pacific Black Ducks
Australasian
Shovelers
Australian
Grey Teal
Masked Lapwings
Welcome Swallows
Flame Robin
Willy Wagtails
Starlings
Magpie Lark

TULLAROOP RESERVOIR

Shelducks
Little Falcon
Eastern Rosellas
Jacky Winters
Southern Yellow Robin
Willy Wagtails
White-browed Babblers
White-bellied Cuckoo Shrike
Eastern Shrike Tit
Blue Wren
Buff-rumped Thornbills
Yellow-rumped Thornbills
Red Wattle Bird
White-plumed Honeyeaters
Fuscous Honeyeaters
Little Raven

WEATHER REPORT:

Extremely cold
southerly wind .
Temp: 7 degrees.



The first film was about life in fresh water and was called "Of Creek and Billabong".

At dawn and dusk Australia's largest fresh water animal is seen emerging from burrows along the banks of creeks and billabongs. The Platypus swims near the bottom of the water seeking the food it likes best; Worms and Yabies make up the bulk of its diet. Also seen is the beautiful Water Rat with its golden fur and white tipped tail while, under the water, in reed beds and stones live a myriad of small animals.

There are fish who also compete for the available food, Blackfish and Native Trout are two and others are the introduced Trout, Redfin and Carp.

Birds are also denizens of creeks and billabongs; Crakes, Coots, and a varieties of Waterfowl as well as Kingfishers and many insect eaters. All can feed well because of the abundant life in these water areas. There is also a constant stream of migrants that only spend part of their life in water or, as in the case of eels, returning to the sea to breed.

In billabongs, however, there is a host of small animals that live only in still water and aquatic plants use the air cells in their leave and the surface tension of the water to float on the surface. Many pond creatures are not often seen, some because they are so shy and secretive while others are so small that they cannot be seen by the naked eye.

The nymphs found in ponds are the fishermen's mudeyes and bear no resemblance to the beautiful, fast flying Dragonflies they become. Many aquatic species are dependent on oxygen and regularly come to the surface to breathe, e.g. Wrigglers or Mosquito larvae; Water Beetles carry a bubble of air under their wings and even a Spider goes into the water. Tadpoles become frogs and continue to live in and near water.

The film highlighted life in the water and was both educational and thought provoking. It showed the need for fast clean streams and pondage areas, for the well being of us all.

The second film was rather humorous. Called "Who's a Clever Bird" it showed how clever some birds are, especially when it comes to obtaining food. It also included a number of birds we don't see.

Our thanks to Frank for his choice of films and a very entertaining evening. L.F.

CSIRO Joins in NASA Earth Watch

The CSIRO Marine Laboratories in Hobart will be participating in NASA's ambitious satellite Earth Watch project to be launched in 1995.

The project will involve an Earth Observation System (EOS) being placed into polar orbit to enable scientists to monitor chemical, physical and biological processes responsible for the Earth's evolution.

The Division of Fisheries project will study the relationship between climate, ocean circulation, biological processes and renewable marine resources in the Australian region.

The CSIRO Division of Fisheries is the only Australian team participating in the project and is one of eight teams chosen from 455 submissions.

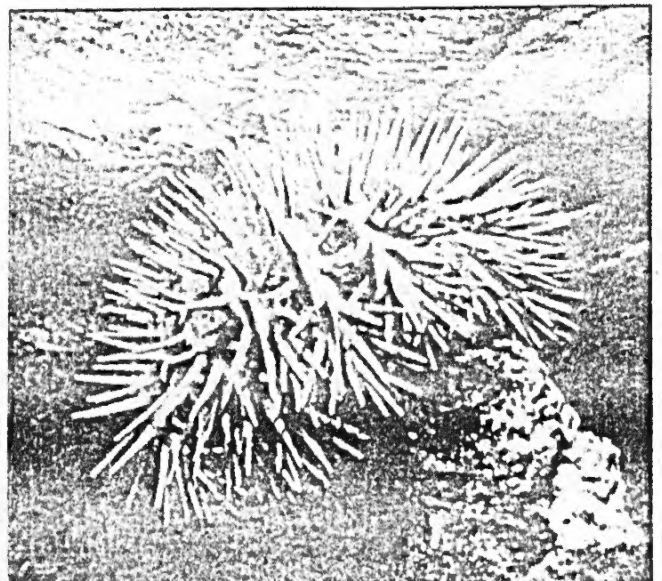
Crown-of-Thorns Starfish Book

So how many eggs does a crown-of-thorn starfish lay during a single breeding season?

The answer to this and every other question you ever wanted to ask about the infamous starfish can be found in a small booklet published by the Australian Institute of Marine Science.

The 35-page book addresses the 40 most commonly asked questions about the starfish and includes colour pictures.

The book that tells you that 50 million crown-of-thorn eggs are laid in a season, can be obtained for \$6.00 including postage by contacting AIMS, PMB No 3, Townsville, MC, Qld, 4810.



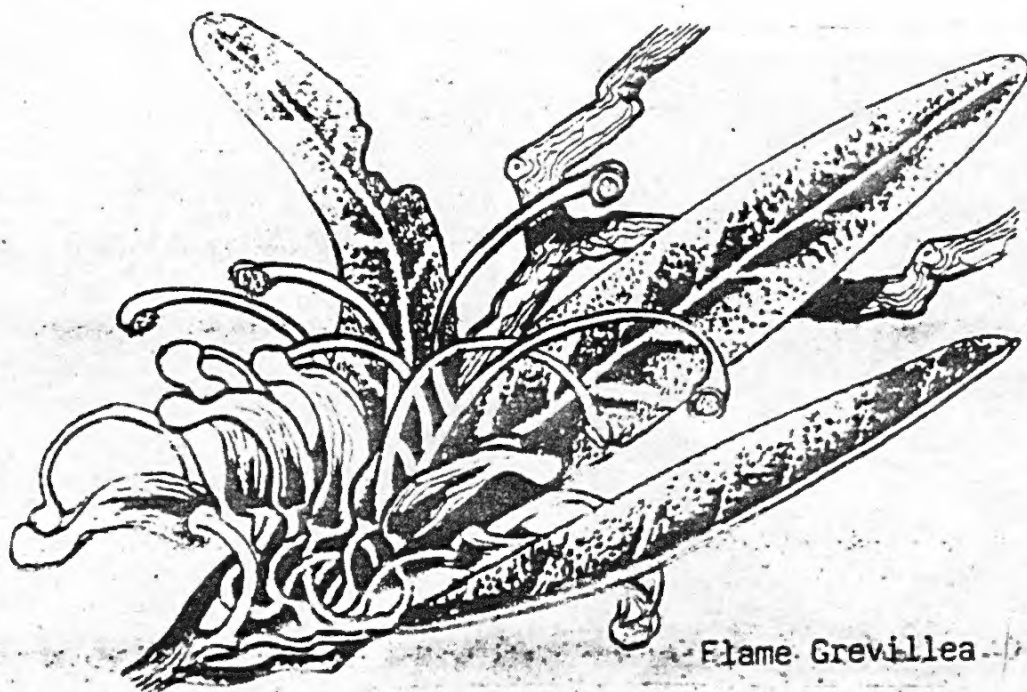
A crown-of-thorns starfish. (Photo: AIMS)

ACROSS

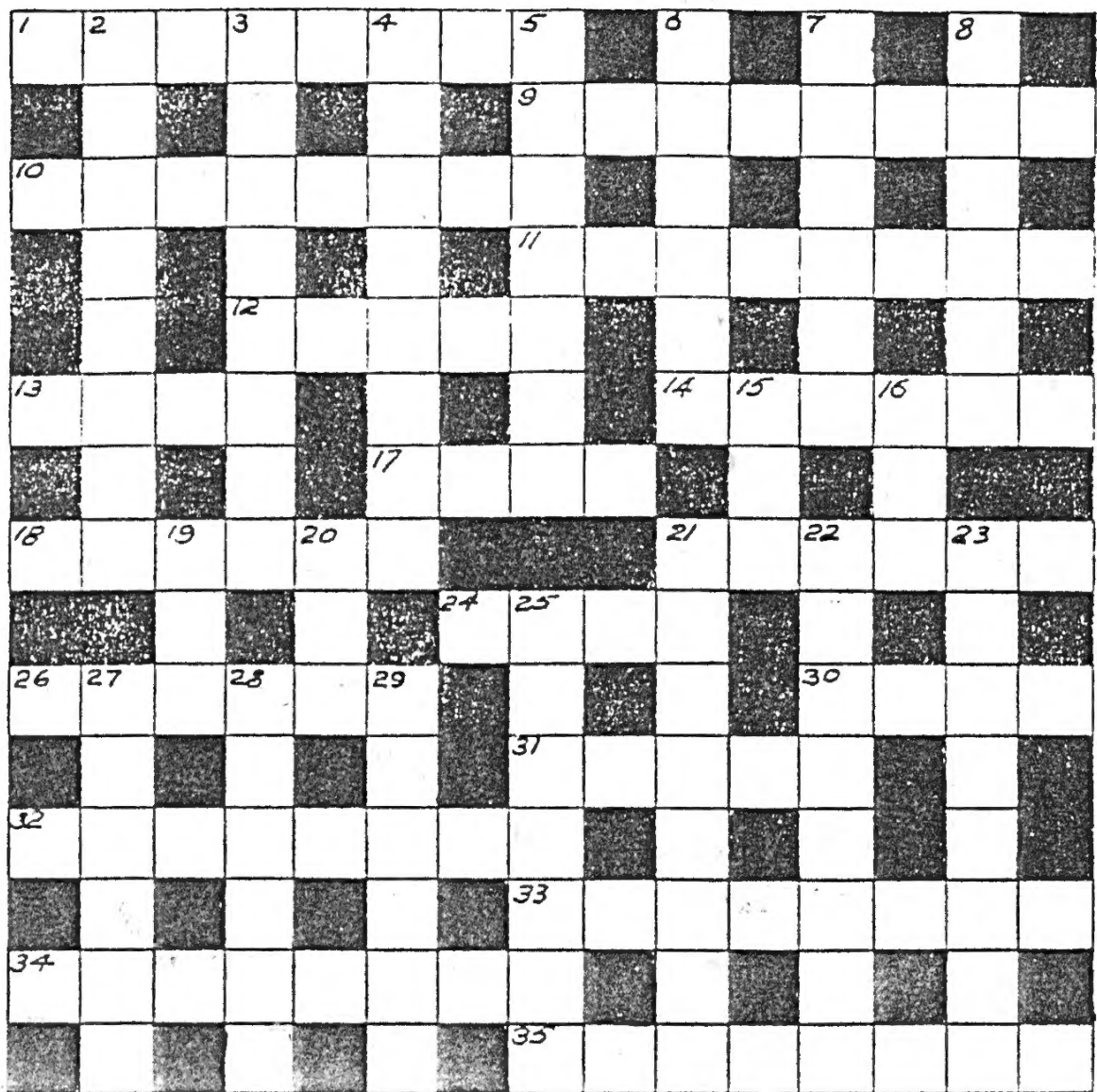
1 Plaice, sole etc. (8) 9 European woody plants—recently subject to a specific disease. (3,4) 10 A Queen Bee can sometimes have more than this! (3,5)
11 Shallot (8) 12 We must be of our environment (5) 13 Canine tooth. (4) 14 Member Ericaceae (6) 17 Eggs (4) 18 Flora (5) 21 KOH (5)
24 Sounds like a runaway insect (4) *Parus caeruleus* (Common name; European bird) (3,3 or 6) 30 Dutch milk product. (Area name) (4) 31 Mark on tree to find way; otherwise dangerous! ⁽⁵⁾ 32 Shouldn't be taken by athletes (8)
33 Fruit given to a non-performer (3,5) 34 Mound building bird (8)
35 Oppidian vermin eradicator (3,5)

DOWN

2 *Crex pratensis*. Corn Crane (Eur.) (8) 3 A spice (8) 4 Copies — as a young learner (8) 5 17 Ac. a breakfast choice. (4,4) 6 African antelope (6) 7 Aust. dancing bird (6) 8 A caterpillar will a butterfly (6)
10 See animals here (3) 16 Meadow (3) 19 Limb (3) Prefix (three) as in triceps) (3) 21 Small parrot (8) 22 Ancient plant still fairly common in parts of Australia. 23 Do we get watery acorns off this? (5,3)
25 Edible crustacean similar to crayfish. (7) 27 Horse handler (6) 28 Not necessarily an Indian mollusc shell (6) 29 This should be a well suited fish! (6)



Flame Grevillea



Toyota Sponsors Student in Arctic Expedition

A young Australian will be participating in a major expedition to the North Pole.

Emma Westerman, a 17-year-old student from Sydney, is being sponsored by Toyota Motor Sales Australia to take part in the expedition known as Icewalk.

Organiser, Robert Swan, who walked to the South Pole in 1986, will be leading an international group of students who will conduct a series of experiments studying the environment in the Arctic.

Emma and another member of the student team will be based at Eureka weather station on Ellesmere Island in the far north of Canada.

Botanical Notes.

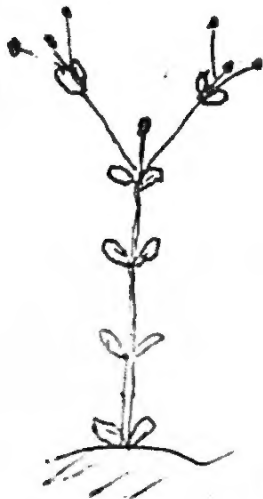
FAMILY GENTIANACEAE

The family takes its name from several gentians which were used in earlier times as medicines and possibly dyes. A greek king, Gentius, was a great herbalist. The genus *Gentiana* is not found near Ballarat (Beaublehole).

The commonest members of the family in this area belong to the genus *Centaurium* (4 species according to Beaublehole). The other genera recorded for Ballarat are:-

Cicendia (sepals fused for $\frac{1}{3}$ to $\frac{1}{2}$ their length)
Sebaea (sepals fused for less than $\frac{1}{3}$ their length)

The main features of the centauries are :-
annual or biennial herbs, with or without a basal rosette;
an erect often much branched inflorescence; leaves sessile;
calyx scarcely tubular; corolla salver-shaped with 5 lobes,
pink, reddish or yellow.



Common Centaury

H.H.

Tailend Trivia

Australia has more reptile species than most other continents.

Of its more than 650 species many are found only in Australia.